American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)
ISSN (Print) 2313-4410, ISSN (Online) 2313-4402

http://asrjetsjournal.org/

Social Commerce Acceptance: Integrated Model with Collaboration Theories and Technology Acceptance Model

Samantha Samarasinghe[a*], Kaveesha Silva[b]

[a,b]*Faculty of Management Studies and Commerce, University of Sri Jayewardenepura, Gangodawila, Nugegoda,Sri Lanka*

[a]*Email: malkanthi@sjp.ac.lk*

[b]*Email: kaveesha.silva@sjp.ac.lk*

Abstract

Social commerce has made a paradigm shift where consumers purchase commodities using social commerce websites. Social media plays a vital role in reaching customers and potential buyers. It has changed the traditional way of marketing into social marketing. Wide acceptance of social media by businesses and consumers apparently have provided enormous research opportunities. Hence, the purpose of the current study was to formulate and validate a comprehensive model to examine consumer intentions of social commerce websites. In this study, Technology Acceptance Model (TAM) was extended with collaboration technology constructs. The model was empirically tested for its statistical validity. Data were collected by administering a survey questionnaire. Structural equation modeling (SEM) approach was used for data analysis. The findings of this study would help to narrow the knowledge gap in this context and will provide valuable information for organizations to develop competitive long-term marketing strategies.

Keywords: Social Commerce; Social Media; Intention to Use; TAM0.

1. Background of the study

Popularity of social networking sites has created a new era of electronic commerce known as social commerce. Social commerce refers to a form of commerce that is mediated by social media and is converging both online and offline environments [1]. This enables consumers to be in an active position in cyber space [2]. The use of social networking sites has increased rapidly. This rapid increase was due to the increase of mobile phone usage and the rapid spread of the Internet [3].

---

* Corresponding author

According to the authors of [4] social networking sites have become a part of human life. Social commerce encompasses the use of web-based media that permit people to participate in marketing transactions; selling, comparing, reviewing, buying, and sharing of products and services in both online and offline marketplaces, and in communities [5:2,6]. Social commerce encourages to get the support of a large network of online peers (formed by friends, colleagues, acquaintances or unknown people) who share their experience on online purchasing related to products and services information [7]. Consumers can share information with their friends and other communities about product characteristics that can help in making online purchasing decisions [5,8:2,9]. Consumers often rely on the advice and recommendations from online friends when making the online purchase decisions [2,10]. As a consequence, the bargaining power has been shifted from the seller to the buyer. This has resulted in shifting the relationship between businesses and existing and potential consumers [11,12]. Today, survival in the e-commerce driven market is difficult unless they incorporate social media into their businesses [2]. Apparently, it is vital for sellers to analyze the impact of social media on consumers' purchase intention. Authors of [13] stressed that investigating the implications of social commerce on consumer decision making process stages, are worth for leveraging the performance of organizations. Evolution of social media and online social networks has opened new streams of research in information systems. The authors of [3] emphasized the importance of investigating the role of social commerce on consumer decision making, specifically their intention to purchase online. Thus, the purpose of the current study is to develop and validate a comprehensive model to examine the role of social commerce on online purchasing intention of consumers. Findings of this study will add value to the social science studies, and it would provide valuable information to marketers on important behavioral factors and social factors in relation to consumer usage of social commerce when developing their marketing strategies. The subsequent sections of the paper are organized as follows. Section 2 provides a review of literature on social commerce and the theoretical foundation of TAM and other constructs. Section 3 presents the conceptual model and the hypotheses formulated based on literature. Section 4 provides the research methodology. Section 5 presents the data analysis. Section 6 will cover the limitations and future research opportunities. Finally, Section 7 presents the conclusion of the study.

2. Literature Review

2.1 Social Media

The authors of [14:61] defined social media as a group of the Internet-based applications that build on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of User Generated Content. The findings of [15] highlighted that individuals use social media sites (Facebook, MySpace, Twitter, YouTube, virtual communities, etc.), to create profiles to share their knowledge and their experiences, to share information about themselves and to interact with others who have similar interests. Social media tools provide better communication channel between firms and other participants (e.g., customers, suppliers, agents etc.) [16]. It is an innovative way for firms to identify products with high selling potentials [17] and a better channel for attracting and retaining online customers. Social media networks alter the way we engaged in marketing and consumers now have direct collaboration with one another [15]. Considerable budget allocations should be done in company's marketing budget for social media marketing as social media is a powerful marketing channel through which companies connect with their target audience [18]. Today, it is

obvious that, social media enables marketers to better serve existing customers and attract prospective customers in an innovative way.

2.2 Online Purchase intention and consumer behavior

The authors of [19] stated that a person will create an attitude based on believes and forms an intention to behave regarding that attitude. Further, they pointed out that the intention to behave is the prime determinant of the actual behavior and it decides the number of attempts they are trying to perform a certain behavior. The researchers of [20] stated the strength of a consumer's intention to make a purchase decision via the Internet will be determined by the customers' online purchase intention in the e-commerce environment. The authors of [21:53] identified three approaches of social influence: 1) compliance (subjective norms) - individuals' identify that a person who owns the power wants them to accomplish a certain behavior, 2) internalization (group norm) - individuals' requirement to accept the goals that shared with others, and 3) identification (social identity) - individuals' preference to create a relationship with another person or a group.

2.3 Social Commerce

Authors of [11:609] defined social commerce as the online buying and selling activities initiated via social media, which entails business transactions through either social media (e.g., on a Facebook store) or other e-commerce sites. According to the author of [22] social commerce refers to a subset of electronic commerce that involves using social media; an online media that supports social collaboration and user assistance to support online purchasing and trading of goods and services. Further, it is considered as a platform that unites people online and influences those connected networks for their business goals [22]. Collaborations on the Internet, especially using social media networks have transformed e-commerce into social commerce enableing companies to reach consumers with greater productivity than integrating user genarated content to traditional shops [5]. The social networks in e-commerce can be accessed by different communication channels and provide facilities for products rating, feedback, reviews, discussion groups and forums and rating about the product quality, trustworthiness and support [7]. Today, online consumers have more control and bargaining power than traditional consumers because the Internet offers more facilities for the consumers and product/service providers as well as availability of information about products and services is high [18]. Authors of [23] identified that the Internet has shifted the balance of power from sellers to consumers as it has become stress-free for them to make comparisons and evaluate product alternatives by avoiding the gravity of salespeople. Moreover, consumers prefer online buying for convenience and most of them search product information before purchasing the products [24]. The authors of [17] identified three major characteristics of social commerce websites: presence of social media technologies, community interactions and commercial activities. According to them, these characteristics create the possibility of information exchange before the purchasing of the product. Further, the authors of [17] affirmed that there are two major structures of social commerce web sites. First, add facility to post advertisements and perform transactions. For instance, Facebook, LinkedIn, and several other social networking web sites allow advertisements that can be easily posted by the members. Second, add social networking competences which allow better recognizion for B2C web sites and provide assistance to their customers.

2.4 Theoretical Foundation

As explained by the author of [22], social commerce is a subset of e-commerce. Hence, the fundamental theories used to explain e-commerce adoption are also used to explain the social commerce engagement of consumers [1,17]. There are well established theories to study the user beliefs and behaviour towards user acceptance and aoption of new technologis. Accordng to the review of literature, Theory of Reasoned Action (TRA) [25,26] Theory of Planned Behaviour (TPB) [27], Diffusion of Innovations Theory (DOI) [28], Unified Theory of Acceptance and Use of Technology (UTAUT) [29], and TAM [30] were prominent theories used by many prior research on technology adoption and acceptance [2,31]. Amongst them the review revealed that TAM [32] as the dominant theory used in IS literature to investigate user acceptance and adoption of different technologies [22,29,33,34]. Thus, in this study, TAM constructs were integrated with collaboration research theories to identify the role of social commerce on online purchase intentions of consumers.

3. Conceptual Model and Hypotheses

TAM has been applied to a range of technology related studies and has been a strong predictor of individuals' technology adoption and acceptance [35]. People will adopt a certain system believing that it will be useful in improving the productivity, and/or individual satisfaction of execution of certain tasks [36]. According to the authors of [30] individual's information technology acceptance behavior is determined by perceived usefulness (PU), perceived ease of use (PEOU), attitudes toward using information technology, and intentions to use information technology. Besides, the review of literature revealed several other factors that were influencing the enactment and gratification of individuals and groups using a technology [36,37,38]. The proposed research model in this study integrated theories from collaboration research with TAM to explain a holistic view of consumer intention to use social commerce. The factors identified in the context of collaboration research (social presence theory, channel expansion theory and the task closure model) were categorized as technology characteristics, individual and group characteristics, task characteristics, and situational characteristics [39]. The current study theorized that the technology characteristics, individual and group characteristics, task characteristics as predictors of PU and PEOU whilst situational characteristics as a predictor of technology use. Thus, the TAM was extended with those antecedents to provide a better view of the role played by social commerce in consumer intention to purchase online.

3.1 Technology Characteristics

Collaboration technologies provide different capabilities for different groups and individuals that can be used in different ways [40]. Same technology can be used in different ways to accomplish different outcomes by the individuals or groups [36]. The author of [41] explained technology characteristics as characteristics used and practiced by the users rather than characteristics in-built in the technology. Authors of [30] explained that social presence theory, media richness theory and the task closure model as important theories that formed the selection of collaboration technologies. Those theories attempt to describe why individuals prefer to choose one technology over other [35]. Thus, in this study, social presence, media richness, immediacy of communication and concurrency adopted from those theories were used as technology characteristics. Further, authors of [30]

identified that PU, PEOU, and attitudes as determinants of technology characteristics. The researchers of [35] proved that these three characteristics as predictors of intention to use. Thus, the following hypotheses are proposed:

H1: Technology characteristics has a positive influence on attitude toward using social commerce

H2: Technology characteristics has a positive influence on PU

H3: Technology characteristics has a positive influence on PEOU

3.2 Individual and Group Characteristics

The researcher of [42] defined individual characteristics as some postulated attributes characterizing one or more individuals and characteristics of a group of individuals can be considered as group characteristics. For the successful use of collaboration technologies, individual and group characteristics are essential [43]. Individuals and groups are trying to fulfill different needs. The investigators of [35] focused on three specific factors which are possible to have the greatest effect on intention to use collaboration technologies. They are technology experience, self-efficacy and familiarity with communication partners. Further, the authors of [39] added one more dimension typing speed, that could affect a user's perception of easy to use and attitude toward the technology. Thus, social commerce experience, typing speed, self-efficacy and familiarity with others are used as individual and group characteristics in this study. These characteristics are important in technology use [35,39]. The authors of [39] identified that individual and group characteristics as determinants of PEOU and attitude towards using the collaboration technology. Thus, the following hypotheses are proposed:

H4: Individual and group characteristics has a positive influence on attitude toward using social commerce

H5: Individual and group characteristics has a positive influence on PEOU

3.3 Task Characteristics

Task characteristics affect attitude of an individual [37,38,43]. In literature, mobility was identified as a task characteristic [35,39]. Mobility refers to the extent to which the tasks performed by the user require him/her to be away from his/her work environment [39:25]. Thus, this study used mobility as the task characteristic which was an important determinant of an individual's attitude towards using social commerce [44]. Mobility will increase the efficiency and effectiveness of a user, using a collaboration technology and thus, the user thinks it will in turn affect PU [43]. Thus, the following hypothesis is proposed:

H6: Task characteristics has a positive influence on PU

3.4 Situational Characteristics

A situation is a context in which the collaboration technology is implemented [43]. Social influence refers to the influence of significant individuals in the organizational context and it can directly affect the intention to use a

collaboration technology [35,45,46]. Collaboration technology use will not depend only on the impact of other individuals but also on a group of individuals [39,47]. Investigators of [39] examined subjective norm as a situational variable. Subjective norm is defined as, an individual's perception of whether or not people important to them think a behavior should be performed [22:55]. Therefore, in this study, subjective norm was identified as a situational characteristic. The author of [27] identified that subjective norm is a strong predictor of intentions to perform a behavior. Further, the findings of [48] proved that people's intention to use social commerce is directly influenced by subjective norm. Thus, the following hypothesis is proposed:

H7: Situational characteristics has a positive influence on intention to use social commerce

3.5 Perceived Usefulness (PU)

PU can be defined as the extent to which an individual perceives that using a system will enhance his/her productivity [30:320]. The authors of [30] identified that PU is correlated with the decision to adopt a new technology. Thus, PU was identified as an important predictor of intention to use a technology [30,49]. The impact of PU on intention to use was tested and validated by many researchers [32,50]. The findings of [51] stated that PU is associated with intention to use new technologies. This relationship was further validated in e-commerce studies [2,22,52]. Moreover, the researchers of [30] identified that PU has a significant impact on attitude toward using a technology. This finding was validated even in social commerce research [8,53,54]. Thus, the following hypotheses are proposed:

H8: PU has a positive influence on intention to use social commerce

H9: PU has a positive influence on attitude toward using social commerce

3.6 Perceived Ease of Use (PEOU)

PEOU refers to the degree to which a person believes that using a system would be free of effort [30:320]. The authors of [30] affirmed that PEOU as an important predictor for potential adopters of systems, as it affects to the experience of the user when they adopt a new system. Which in turn results in the increase of PEOU. The authors of [55] identified PEOU as the capability of navigating and evaluating the content of social networking sites with or without any influence of others. Further, some other studies identified PEOU as a significant predictor in understanding and explaining the intention to buy in social commerce [2,56,39]. Moreover, researchers of [26] proved that PEOU has a direct influence on PU and attitude towards using a technology. This finding was further justified by the author of [32,44,53]. A large number of prior studies have proved that PEOU has an impact on PU [57,58,59]. Thus, the following hypotheses are formulated:

H10: PEOU has a positive influence on PU

H11: PEOU has a positive influence on the attitude toward using social commerce

H12: PEOU has a positive influence on the intention to use social commerce

3.7 Attitude toward using social commerce

Attitude is formed based on the beliefs of the consequences of a behavior and individuals' assessment of those consequences [60]. This was commonly studied and further validated in previous research by providing that attitude towards using a technology has a significant direct effect on the intention to use a technology [26,30,61,62]. This finding was validated even in social commerce research [8,44,53,54]. Thus, based on the above justification the following hypothesis was formulated:

H13: Attitude towards using social commerce has a positive influence on the intention to use social commerce.

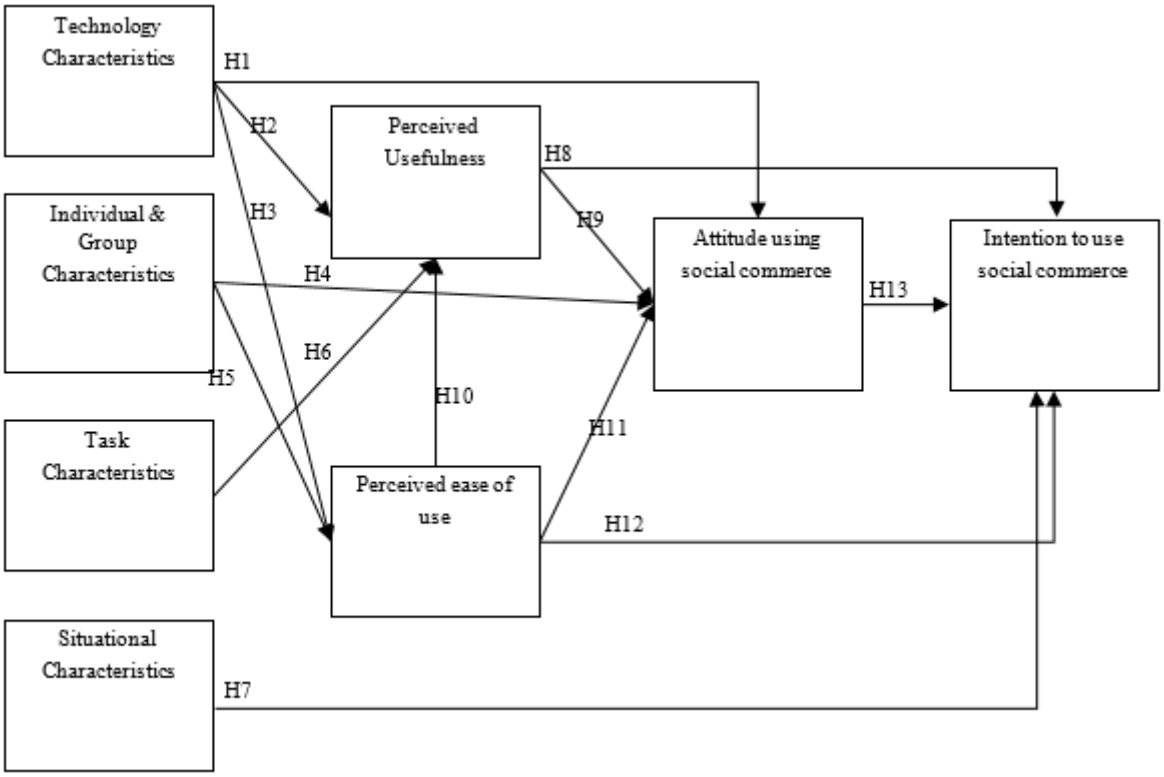

Figure 1: Conceptual Model

4. Methodology

This study can be characterized as an exploratory research [63]. The study employed the quantitative method by administering a survey questionnaire. An online survey was used to collect data and it was developed using items validated in prior research. This has ensured the face validity of the survey instrument. All the items were measured using a 7-point Likert scale with the anchors from "Strongly disagree" to "Strongly agree". Questionnaire survey method and the 7-point Likert scale was commonly used in similar prior studies [56,64,65]. The first section of the questionnaire consists of questions to measure the independent variables and the dependent variable whereas the final section of the questionnaire comprised of questions to collect demographic data of respondents. The sample was selected by using simple random sampling. The questionnaire was administered to postgraduate students who are following MBA/MSc programs at the

University of Sri Jayewardenepura. The online questionnaire was shared among 500 participants through e-mail. 160 responses were received resulting 32% total response rate and the 152 complete responses were used for the analysis. The findings of [66] revealed that postgraduate students are a very good target group for e-commerce research studies as they have access to the Internet and have the opportunity to use the Internet for communication and online purchases. Two reminders were used in the data collection to increase the response rate. In data analysis, Statistical Package for Social Sciences (SPSS Version 23) was used for data screening and descriptive data analysis and Partial Least Square Structural Equation Modelling (PLS-SEM) was used for validating the model and for hypotheses testing. Table 1 presents the sample composition by age and the gender of the respondent.

Table 1: Sample composition by age and the gender of the respondent

Gender / Age	Male		Female	
25-30 years	13	9%	89	59%
31-35 years	29	19%	9	6%
36-40 years	3	2%	4	3%
41-45 years	5	3%	0	0%
More than 45 years	0	0%	0	0%

5. Data Analysis

As this study used self-reported survey method; to address the issue of common method variance, Harman's single factor test was applied. Exploratory Factor Analysis with unrotated solution results revealed that the highest covariance explained by one factor was 26%. Hence, neither of the factors constitute the majority of variance. PLS-SEM was used to assess the conceptual model. Thus, measurement model and structural model were evaluated using Smart PLS 3.0.

5.1 Measurement Model Evaluation

As all the outer loadings were above the accepted level of 0.6 [67,68] which ensures the content validity of the questionnaire. Composite reliability values which are greater than 0.80 established the internal consistency of the model. The reliability was assured as all the Cronbach's alpha coefficients and the composite reliability scores were in the threshold level which was suggested by [68]. Measurement scales' validity was established through Confirmatory factor analysis. Factor loadings, composite reliability and the Average Variance Extracted (AVE) values were used to ensure the convergent validity. AVE s for each latent variable were higher than 0.5, thus providing adequate level of convergent validity. As none of the square roots were greater than its highest correlation with any other latent construct [69] discriminant validity was established.

Table 2: Composite reliability and Convergent validity of the constructs

	Cronbach's Alpha	Composite Reliability	AVE
Individual and Group Characteristics	0.908	0.924	0.55
Situational Characteristics	0.931	0.956	0.879
Task Characteristics	0.832	0.901	0.753
Technology Characteristics	0.924	0.934	0.454
Perceived Ease of Use	0.85	0.894	0.629
Perceived Usefulness	0.898	0.922	0.665
Attitude Toward using Social Commerce	0.814	0.878	0.644
Intention to use Social Commerce	0.903	0.905	0.928

Table 3: Correlations between main constructs

	Attitude Toward using Social Commerce	Individual and Group Characteristics	Intention to use Social Commerce	Perceived Ease of Use	Perceived Usefulness	Situational Characteristics	Task Characteristics	Technology Characteristics
Attitude Toward using Social Commerce	**0.802**							
Individual and Group Characteristics	0.579	**0.742**						
Intention to use Social Commerce	0.778	0.603	**0.849**					
Perceived Ease of Use	0.692	0.615	0.676	**0.793**				
Perceived Usefulness	0.709	0.588	0.739	0.613	**0.816**			
Situational Characteristics	0.514	0.678	0.591	0.499	0.695	**0.937**		
Task Characteristics	0.672	0.739	0.599	0.592	0.629	0.616	**0.868**	
Technology Characteristics	0.704	0.720	0.661	0.617	0.693	0.569	0.682	**0.674**

5.2 Structural Model Evaluation

The model's predictive power and the associations amongst the constructs were investigated in order to judge the quality of the model [69]. Coefficient of Determination (R^2 Value) was used to determine the model fit. Findings of [69] suggested that in general, R^2 values of 0.75, 0.50, or 0.25 for the endogenous construct can be described as substantial, moderate, and weak, respectively. Accordingly, model explained 64.8% of variance in attitude towards using social commerce, 69.9% in intention to use, 44.1% in PEOU and 55.8% in PU. The strength of the relationships in the conceptual model was assessed using path coefficients. From the hypotheses

specified above, all hypotheses, except hypotheses H4 and H7, were accepted at $p<0.05$ confidence level.

Table 4: Summary of the hypothesis testing

Hypothesis		Beta value	p value	Result
H1	Technology characteristics has a positive influence on attitude toward using social commerce	0.302	0.001	Supported
H2	Technology characteristics has a positive influence on PU	0.398	0.000	Supported
H3	Technology characteristics has a positive influence on PEOU	0.362	0.000	Supported
H4	Individual and group characteristics has a positive influence on attitude toward using social commerce	-0.025	0.751	Not Supported
H5	Individual and group characteristics has a positive influence on PEOU	0.354	0.000	Supported
H6	Task characteristics has a positive influence on PU	0.215	0.009	Supported
H7	Situational characteristics has a positive influence on intention to use social commerce	0.110	0.213	Not Supported
H8	PU has a positive influence on intention to use social commerce	0.260	0.005	Supported
H9	PU has a positive influence on attitude toward using social commerce	0.313	0.000	Supported
H10	PEOU has a positive influence on PU	0.241	0.016	Supported
H11	PEOU has a positive influence on the attitude toward using social commerce	0.329	0.000	Supported
H12	PEOU has a positive influence on the intention to use social commerce	0.172	0.041	Supported
H13	Attitude towards using social commerce has a positive influence on the intention to use social commerce	0.418	0.000	Supported

6. Discussion

Rapid increase in the usage of social media has made social media mediated purchasing more popular. According to the findings of this study, it was identified that technology characteristics, task characteristics and PEOU has a positive influence on PU which confirms the research findings of [39,70]. Further, hypothesis relating to individual and group characteristics and situational characteristics when determining the use of social commerce were not supported where these findings are consistent with the findings of [35,39,70]. Moreover, it was identified that there is a positive influence on PU, attitude of using social commerce and intention to use social commerce from PEOU. These findings are consistent with the findings of [39,70]. Similarly, this study confirms the findings of [35,39,70] by having a positive influence from attitude of using social commerce on the intention to use social commerce. Attitude towards using social commerce had the highest effect on intension to

use social commerce. Further, technology characteristics had a strong effect on PU and PEOU. The findings were consistent with previous research [39,70].

7. Limitations and future research

Cross sectional nature of the study can be identified as a limitation of this research. As technology is a highly dynamic concept, it creates avenues for longitudinal studies in future. As the study utilized the responses received from the postgraduate students in Sri Lanka generalizability to the consumers in other countries should be examined in future research. Thus, researchers have the opportunity to do cross cultural analysis in future.

8. Conclusion

The purpose of the current study was to identify the role of social media on consumers' online purchase intention as it could provide vital information for organizations in developing their marketing strategies. TAM was extended with the factors from collaboration theories identified through the review of literature. Those factors were categorized as technology characteristics, individual and group characteristics, task characteristics, and situational characteristics. The model will provide a better representation of the role of social commerce on customer intention to purchase online. The conceptual model was statistically validated in this study with the empirical data. This study will add value to social science studies by validating a comprehensive model in examining the role of social commerce on online purchase intention of consumers. Hence, it will narrow the knowledge gap in this context. Furthermore, this study has important implications for marketers in terms of developing marketing strategies by understanding the consumer behavior. Thus, the findings of this study would provide valuable information to strategy developers in organizations about important social and behavioral factors that affect the use of social commerce by customers. According to the findings of the study, significant relationships between the identified factors of collaboration theories and TAM constructs were identified.

References

[1] C. Wang and P. Zhang, "The Evolution of Social Commerce: The People, Business, Technology, and Information Dimensions," Communications of the Association for Information Systems, vol. 31, no. 1, pp. 105-126, 2012.

[2] M. Hajli, Social Commerce Adoption Model, 2019.

[3] H. A. H. Hettiarachchi, C. N. Wickramasinghe and S. Ranathunga, "The Role of Social Commerce on Consumer Decisions: A Theoretical Foundation," Journal of Business and Technology, vol. 1, no. 2, pp. 120-139, 2017.

[4] K. Gayathri, T. Thomas and J. Jayasudha, "Security issues of media sharing in social cloud," in International Conference on Modelling, Optimisation and Computing (ICMOC 2012), 2012.

[5] L. Zhou, P. Zhang and H.-D. Zimmermann, Social Commerce Research : An Integrated view, 2013.

[6] J. H. Heinrichs, J.-S. Lim and K.-S. Lim, "Influence of social networking site and user access method on social media evaluation," Journal of Consumer Behaviour, vol. 10, no. 6, pp. 347-355, 2011.

[7] C. Maia, G. Lunardi, A. Longaray and P. Munhoz, "Factors and characteristics that influence

consumers' participation in social commerce," Revista de Gestão, vol. 25, no. 2, 2018.

[8] P. Leitner and T. Grechenig, "Scalable social software services: towards a shopping community model based on analyses of established web service components and functions," in 42nd Hawaii International Conference on System Sciences, Washington,, 2009.

[9] Y. A. Kim and J. Srivastava, "Impact of Social Influence in E-Commerce Decision Making," in International Conference on Electronic Commerce, 2007.

[10] J. Chen and X.-L. Shen, "Consumers' decisions in social commerce context: An empirical investigation," Decision Support Systems, vol. 79, pp. 55-64, 2015.

[11] C. See-Pui, "Intention to purchase on social commerce websites across cultures: A cross-regional study," Information & Management, vol. 50, no. 8, pp. 609-620, 2013.

[12] R. T. Wigand and R. I. Benjamin, "Web 2.0 and Beyond: Implications for Electronic Commerce," in 10th International Conference on Electronic Commerce (ICEC), 2008.

[13] M. S. Yadav, K. d. Valck, T. Hennig-Thurau, D. L. Hoffman and M. Spann, "Social Commerce: A Contingency Framework for Assessing Marketing Potential," Journal of Interactive Marketing, vol. 27, no. 4, pp. 311-323, 2013.

[14] A. M. Kaplan and M. Haenlein, "Users of the world, unite! The challenges and opportunities of Social Media," Business Horizons, vol. 53, no. 1, pp. 59-68, 2010.

[15] C. M. Cheung and M. K. Lee, "A theoretical model of intentional social action in online social networks," Decision Support Systems, vol. 49, no. 1, pp. 24-30, 2010.

[16] M. J. Culnan, P. J. McHugh and J. I. Zubillaga, "How Large U.S. Companies Can Use Twitter and Other Social Media to Gain Business Value," MIS Quarterly Executive, vol. 9, no. 4, pp. 243-259, 2010.

[17] T.-P. Liang and E. Turban, "Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce," International Journal of Electronic Commerce, vol. 16, no. 2, pp. 5-13, 2014.

[18] C. A. Jothi and A. M. Gaffoor, "Impact of social media in online shopping," Journal on Management Studies, vol. 3, no. 3, pp. 576-586, 2017.

[19] H. v. d. Heijde, T. Verhagen and M. Creemers, "Understanding online purchase intentions: contributions from technology and trust perspectives," European Journal of Information Systems, vol. 12, no. 1, pp. 41-48, 2003.

[20] W. D. Salisbury, R. A. Pearson, A. W. Pearson and D. W. Miller, "Perceived security and World Wide Web purchase intention," Industrial Management & Data Systems, vol. 101, no. 4, pp. 165-176, 2001.

[21] H. C. Kelman, "Compliance, identification, and internalization: three processes of attitude change," Journal of Conflict Resolution, vol. 2, no. 1, pp. 51-60, 1958.

[22] D. H. Shin, "User experience in social commerce: in friends we trust," Behaviour & Information Technology, vol. 32, no. 1, pp. 52-67, 2013.

[23] G. L. Geissler and G. M. Zinkhan, "Consumer Perceptions of the World Wide Web: an Exploratory Study using Focus Group Interviews," Advances in Consumer Research, vol. 25, pp. 386-392, 1998.

[24] E. Ioanăs and I. Stoica, "Social media and its impact on consumers behavior," International Journal of Economic Practices and Theories, vol. 4, no. 2, pp. 297-303, 2014.

[25] I. Ajzen and M. Fishbein, Understanding Attitudes and Predicting Social Behavior, Englewood Cliffs, N.J. : Prentice-Hall, 1980.

[26] I. Ajzen, M. Fishbein and N. A. Flanders, Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research, 1975.

[27] I. Ajzen, "The Theory of Planned Behavior," Organizational Behavior and Human Decision Processes, vol. 50, no. 2, pp. 179-211, 1991.

[28] E. M. Rogers, Diffusion of Innovations, 3rd ed., New York: The Free Press, 1962.

[29] V. Venkatesh, M. G. Morris and G. B. Davis, "User acceptance of Information Technology toward a unified view," MIS Quarterly, vol. 27, no. 3, pp. 425-478, 2003.

[30] F. D. Davis, R. P. Bagozzi and P. R. Warshaw, "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," Management Science, vol. 35, no. 8, pp. 982-1003, 1989.

[31] K. Z. Zhang and M. Benyoucef, "Consumer behavior in social commerce: A literature review," Decision Support Systems, vol. 86, pp. 95-108, 2016.

[32] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," MIS Quarterly, vol. 13, no. 3, pp. 319-340, 1989.

[33] J. W. Moon and Y.-G. Kim, "Extending the TAM for a World-Wide-Web context," Information & Management, vol. 38, no. 4, pp. 217-230, 2001.

[34] D. Gefen, E. Karahanna and D. W. Straub, "Trust and TAM in Online Shopping: An Integrated Model," MIS Quarterly, vol. 27, no. 1, pp. 51-90, 2003.

[35] S. A. Brown, A. R. Dennis and V. Venkatesh, "Predicting Collaboration Technology Use: Integrating Technology Adoption and Collaboration Research," Journal of Management Information Systems, vol. 27, no. 2, pp. 9-54, 2010.

[36] A. R. Dennis, B. H. Wixom and R. J. Vandenberg, "Understanding Fit and Appropriation Effects in Group Support Systems via Meta-Analysis," MIS Quarterly, vol. 25, no. 2, pp. 167-193, 2001.

[37] J. Fjermestad and S. R. Hiltz, "An Assessment of Group Support Systems Experimental Research: Methodology and Results," Journal of Management Information Systems, vol. 15, pp. 7-149, 1999.

[38] J. Fjermestad and S. R. Hiltz, "Group Support Systems: A Descriptive Evaluation of Case and Field Studies," Journal of Management Information Systems, vol. 17, no. 3, pp. 115-159, 2000.

[39] A. R. Dennis, V. Venkatesh and V. Ramesh, "Adoption of Collaboration Technologies: Integrating Technology Acceptance and Collaboration Technology Research," All Sprouts Content, vol. 3, no. 8, 2003.

[40] F. Ackermann and C. Eden, "Contrasting Single User and Networked Group Decision Support Systems for Strategy Making," Group Decision and Negotiation, vol. 10, no. 1, pp. 47-66, 2001.

[41] W. J. Orlikowski, "Using Technology and Constituting Structures; A Practice Lens for Studying Technology in organizations," Organization Science, vol. 11, no. 4, pp. 404-428, 2000.

[42] R. A. Roe, "Individual characteristics," in Handbook of Work and Organizational Psychology, 1984.

[43] A. R. Dennis, J. F. George, L. M. Jessup, J. F. Nunamaker and J. a. D. R. Vogel, "Information Technology to Support Electronic Meetings," MIS Quarterly, vol. 12, no. 4, pp. 591-624, 1988.

[44] A. Shdaifat, R. Obeidallah and G. Ghazal, "The impact and attitude toward social-media commerce within the Jordanian market," International Journal of Information Systems and Change Management,

vol. 8, no. 4, pp. 284-299, 2016.

[45] S. Taylor and P. A. Todd, "Understanding Information Technology Usage: A Test of Competing Models," Information Systems Research, vol. 6, no. 2, pp. 144-176, 1995.

[46] D. S. Bajwa, L. F. Lewis, G. Pervan, V. S. Lai, B. E. Munkvold and G. Schwabe, "Factors in the Global Assimilation of Collaborative Information Technologies: An Exploratory Investigation in Five Regions," Journal of Management Information Systems, vol. 25, no. 1, pp. 131-165, 2014.

[47] M. L. Markus, "Toward a "Critical Mass" Theory of Interactive Media: Universal Access, Interdependence and Diffusion," Communication Research, vol. 14, no. 5, pp. 491-511, 1987.

[48] "S-Commerce Report," E-consultancy, 2007.

[49] A. Bhattacherjee, "Understanding Information Systems Continuance: An Expectation-Confirmation Model," MIS Quarterly, vol. 25, no. 3, pp. 351-370, 2001.

[50] M. Koufaris, "Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior," Information Systems Research, vol. 13, no. 2, pp. 205-223, 2002.

[51] R. Agarwal and J. Prasad, "Are Individual Differences Germane to the Acceptance of New Information Technologies?," Decision Sciences, vol. 30, no. 2, pp. 361-391, 1999.

[52] R. Fayad and D. Paper, "The Technology Acceptance Model E-Commerce Extension: A Conceptual Framework," Procedia Economics and Finance, vol. 26, pp. 1000-1006, 2015.

[53] T. Bounkhong, Factors Affecting Intentions to Use Social Commerce in Shopping for Fashion Products, 2017.

[54] T. Indarsin and H. Ali, "Attitude toward Using m-Commerce: The Analysis of Perceived Usefulness, Perceived Ease of Use, and Perceived Trust: Case Study in Ikens Wholesale Trade, Jakarta – Indonesia," Saudi Journal of Business and Management Studies, vol. 2, no. 11, pp. 995-1007, 2017.

[55] A. T. Shittu, K. M. Basha, N. S. N. AbdulRahman and T. B. T. Ahmad, "Investigating students' attitude and intention to use social software in higher institution of learning in Malaysia," Multicultural Education & Technology Journal, vol. 5, no. 3, pp. 194-208, 2011.

[56] A. M. Berry, Behavioral Intention and Use Behavior of Social Networking Websites among Senior Adults, Nova Southern University, 2017.

[57] V. Bhatiasevi and C. Yoopetch, "The determinants of intention to use electronic booking among young users in Thailand," Journal of Hospitality and Tourism Management, vol. 23, pp. 1-11, 2015.

[58] S. H. Kim, "A Study on Adoption Factors of Korean Smartphone Users : A Focus on TAM (Technology Acceptance Model) and UTAUT (Unified Theory of Acceptance and Use of Technology)," Advanced Science and Technology Letters, vol. 57, pp. 27-30, 2014.

[59] T. Ramayah and M. Lo, "Impact of shared beliefs on “perceived usefulness” and “ease of use” in the implementation of an enterprise resource planning system," Management Research News, vol. 30, no. 6, pp. 420-431, 2007.

[60] G. C. Moore and I. Benbasat, "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation," Information Systems Research, vol. 2, no. 3, pp. 192-222, 1991.

[61] G. K. W. Wong, "Understanding technology acceptance in pre-service teachers of primary mathematics in Hong Kong," Australasian Journal of Educational Technology, vol. 31, no. 6, pp. 713-735, 2015.

[62] J. Kim, Y. J. Ma and J. Park, "Are US consumers ready to adopt mobile technology for fashion goods?: An integrated theoretical approach," Journal of Fashion Marketing and Management, vol. 13, no. 2, pp. 215-230, 2009.

[63] J. F. Hair, M. Celsi, A. Money, P. Samouel and M. Page, Essentials of Business Research Methods, 3rd ed., New York: Routledge, 2015.

[64] A. R. Dennis and S. T. Kinney, "Testing Media Richness Theory in the New Media: The Effects of Cues, Feedback, and Task Equivocality," Information Systems Research, vol. 9, no. 3, pp. 256-274, 1998.

[65] D. A. Jeffrey, Testing the Technology Acceptance Model 3 (TAM 3) with the Inclusion of Change Fatigue and Overload, in the Context of Faculty from Seventhday Adventist Universities : A Revised Model, 2015.

[66] R. Walczuch and H. Lundgren, "Psychological antecedents of institution-based consumer trust in e-retailing," Information & Management, vol. 42, no. 1, pp. 159-177, 2004.

[67] W. W. Chin, "Commentary: Issues and opinion on structural equation modeling," MIS Quarterly, 1998.

[68] W. W. Chin , B. L. Marcolin and P. R. Newsted , "A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and an Electronic-Mail Emotion/Adoption Study," Information Systems Research, vol. 14, no. 2, pp. 189-217, 2003.

[69] J. F. Hair, G. T. M. Hult, C. M. Ringle and M. Sarstedt, A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), vol. Second edition, SAGE Publications, Inc., 2017.

[70] P. Tan, “An Empirical Study of How the Learning Attitudes of College Students toward English E-Tutoring Websites Affect Site Sustainability,” Sustainability, vol. 11, no. 6, p. 1748, Mar. 2019.